

WHAT IS CLAIMED IS:

1. A liquid crystal display device comprising:

a pair of substrates, at least one of said substrates being transparent;

a liquid crystal layer interposed between the pair of substrate;

5 a sealing material being formed in an outside portion of the liquid crystal layer and being formed between the pair of substrates;

a peripheral seal portion being formed in an inside portion of end portions of the pair of substrates;

10 an open portion for injecting a liquid crystal material being formed in a side of the sealing material;

at least a seal stopper portion being formed in both end portions of the side,

wherein the seal stopper portion extends from the sealing material to an end portion of the pair of substrates opposing the liquid crystal layer.

2. A device according to claim 1,

15 wherein a plurality of seal stopper portions are formed in parallel from the seal stopper portion with respect to a side of the open portion.

3. A device according to claim 1,

wherein a plurality of seal stopper portions are formed in an opposite side of the open portion.

20 4. A device according to claim 3,

wherein a seal stopper portion is formed in an outside portion of the peripheral seal portion and on an axis of symmetry of the substrates.

5. A device according to claim 1,

wherein a damming portion is formed in the open portion.

6. A liquid crystal display device comprising:

a pair of substrates having different sizes, at least one of said substrates being

5 transparent;

a liquid crystal layer interposed between the pair of substrate;

a sealing material being formed in an outside portion of the liquid crystal layer  
and being formed between the pair of substrates;

a peripheral seal portion being formed in an inside portion of end portions of  
10 the pair of substrates;

an open portion for injecting a liquid crystal material being formed in a side of  
the sealing material;

at least a seal stopper portion being formed in both end portions of the side,

wherein the seal stopper portion extends from the sealing material to a corner  
15 of the pair of substrates opposing the liquid crystal layer.

7. A liquid crystal display device comprising:

a pair of substrates, at least one of said substrates being transparent;

a liquid crystal layer interposed between the pair of substrate;

a sealing material being formed in an outside portion of the liquid crystal layer  
20 and being formed between the pair of substrates;

a peripheral seal portion being formed in an inside portion of end portions of  
the pair of substrates;

an open portion for injecting a liquid crystal material being formed in a corner  
of the sealing material.

8. A device according to claim 7,

wherein a plurality of seal stopper portions are formed in an outside portion of the open portion.

9. A device according to claim 7,

5 wherein a plurality of seal stopper portions are formed in an opposite corner of the open portion.

10. A device according to claim 10,

wherein a plurality of seal stopper portions are formed in an outside portion of the peripheral seal portion,

10 wherein the plurality of seal stopper portions are formed in two corners other than the open portion and an opposite corner of the open portion.

11. A device according to claim 10,

wherein a seal stopper portion is formed in an outside portion of the peripheral seal portion and on an axis of symmetry of the substrates.

15 12. A device according to claim 7,

wherein a damming portion is formed in the open portion.

13. A method of of manufacturing the liquid crystal display device of claim 7,

said method comprising the steps of:

20 forming an orientation film over each of an element substrate and an opposing substrate;

performing an orientation process to each of the element and opposing substrates;

forming the sealing material on one of the element and opposing  
substrates;

joining the element and opposing substrates;

separating the joined element and opposing substrates to form at least an  
5 empty liquid crystal display device;

injecting the liquid crystal material into the empty liquid crystal display  
device through an immersion method,

wherein a V-shape liquid crystal dish being possible of contacting the  
open portion formed in the corner of the empty liquid crystal display device is used in the  
10 injection step.

14. A method of manufacturing a liquid crystal display device, said method  
comprising the steps of:

preparing an element substrate and an opposing substrate, one of said element  
and opposing substrates having a hole portion being possible of injecting a liquid crystal  
15 material;

forming an orientation film over each of the element and the opposing  
substrates;

performing an orientation film to each of the element and opposing  
substrates;

20 forming a sealing material on one of the element and opposing substrates;

joining the element and opposing substrates;

injecting the liquid crystal material into the hole portion;

separating the joined element and opposing substrates to form at least the  
liquid crystal display device having an open portion, a peripheral seal portion and an  
25 external lead-out wiring portion.

15. A method of manufacturing a liquid crystal display device, said method comprising the steps of:

preparing a first substrate and a second substrate, said first substrate having a pixel portion and a driver portion;

5 forming a peripheral seal portion over one of the first and second substrates, said peripheral seal portion surrounding the pixel portion and the driver portion;

forming an injection port for injecting a liquid crystal material;

forming at least a first seal stopper portion over one of the first and second substrates;

10 joining the first and second substrates;

separating the joined first and second substrates to form at least an empty liquid crystal display device;

injecting the liquid crystal material into the empty liquid crystal display device,

15 wherein the first seal stopper portion extends from the peripheral seal portion to an end portion of the first and second substrates opposing the peripheral seal portion.

16. A method according to claim 15,

20 wherein at least a second seal stopper portion is formed between the seal stopper portion and the injection port,

wherein the second seal stopper portion is formed in parallel with the first seal stopper portion.

17. A method according to claim 15,

25 wherein a plurality of seal stopper portions are formed in an opposite side of the injection port.

18. A method according to claim 15,

wherein a second seal stopper portion is formed in an outside portion of the peripheral seal portion and on an axis of symmetry of the first substrate.

19. A method according to claim 15,

5 wherein a damming portion is formed in the injection port.

20. A method of manufacturing a liquid crystal display device, said method comprising of:

preparing a first substrate and a second substrate, said first substrate having a pixel portion and a driver portion and having a different size from the second  
10 substrate;

forming a peripheral seal portion over one of the first and second substrates, said peripheral seal portion surrounding the pixel portion and the driver portion;

forming an injection port for injecting a liquid crystal material;

forming at least a first seal stopper portion over one of the first and second  
15 substrates;

joining the first and second substrates;

separating the joined first and second substrates to form at least an empty liquid crystal display device;

injecting the liquid crystal material into the empty liquid crystal display  
20 device,

wherein the first seal stopper portion extends from the peripheral seal portion to a corner of the first and second substrates opposing the peripheral seal portion.

21. A method of manufacturing a liquid crystal display device, said method comprising the steps of:

preparing a first substrate and a second substrate, said first substrate having a pixel portion and a driver portion;

forming a peripheral seal portion over one of the first and second substrates, said peripheral seal portion surrounding the pixel portion and the driver portion;

5 forming an injection port for injecting a liquid crystal material;

joining the first and second substrates;

separating the joined first and second substrates to form at least an empty liquid crystal display device;

10 injecting the liquid crystal material into the empty liquid crystal display device,

wherein the injection port is formed in a corner of the first and second substrates.

22. A method according to claim 21,

15 wherein a plurality of seal stopper portions are formed in an outside portion of the injection port.

23. A method according to claim 21,

wherein a plurality of seal stopper portions are formed in an opposite corner of the injection port.

24. A method according to claim 21,

20 wherein a plurality of seal stopper portions are formed in an outside portion of the peripheral seal portion,

wherein the plurality of seal stopper portions are formed in two corners other than the injection port and an opposite corner of injection port.

25. A method according to claim 21,

wherein a seal stopper portion is formed in an outside portion of the peripheral seal portion and on an axis of symmetry of the first substrate.

26. A method according to claim 21,

5 wherein a damming portion is formed in the injection port.